

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061695

Luminaire Tested: S125RDR-S610D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061695
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S610D840-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

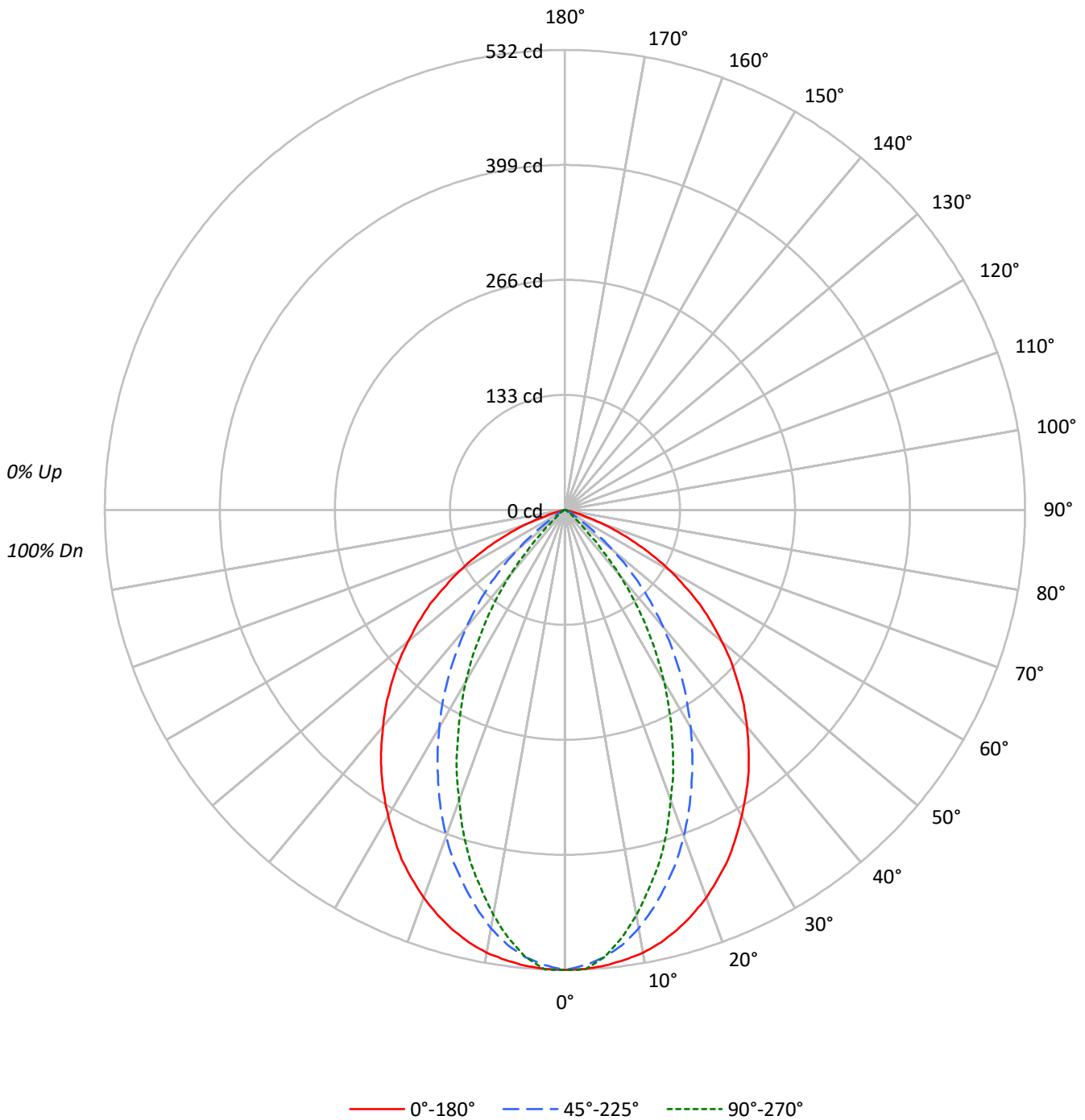
Lumens per Lamp: N/A
Luminaire Lumens: 687.6 lumens
Efficiency: N/A
Efficacy: 35.1 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3664	3664	3664
5°	3659	3591	3591
10°	3638	3436	3329
15°	3584	3208	3008
20°	3499	2943	2619
25°	3393	2635	2230
30°	3249	2311	1820
35°	3110	1971	1363
40°	2941	1590	884
45°	2756	1204	383
50°	2534	767	142
55°	2284	337	101
60°	1933	145	67
65°	1465	91	34
70°	890	42	14
75°	186	19	19
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2756 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	7.1
10°-20°	127.9	18.6
20°-30°	164.2	23.9
30°-40°	154.6	22.5
40°-50°	108.1	15.7
50°-60°	57.7	8.4
60°-70°	23.0	3.3
70°-80°	3.0	0.4
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	341.2	49.6
0°-40°	495.8	72.1
0°-60°	661.6	96.2
0°-90°	687.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	687.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	532	532	532	532	532	
5°	529	528	520	521	520	50
15°	503	487	450	429	422	141
25°	447	407	347	309	294	205
35°	370	311	234	181	162	231
45°	283	212	124	60	39	218
55°	190	117	28	10	8	169
65°	90	36	6	3	2	89
75°	7	2	1	1	1	14
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	532.2	532.2	532.2	532.2	532.2
2.5°	531.5	532.2	527.3	531.5	532.2
5°	529.4	528.0	519.6	521.0	519.6
7.5°	525.2	521.7	507.7	502.8	499.9
10°	520.3	512.6	491.5	481.0	476.1
12.5°	512.6	501.3	471.9	455.7	448.7
15°	502.8	486.6	450.1	429.0	422.0
17.5°	490.8	469.8	427.6	401.6	391.1
20°	477.5	449.4	401.6	370.7	357.4
22.5°	462.0	429.7	375.0	340.6	327.2
25°	446.6	407.3	346.9	309.0	293.5
27.5°	427.6	384.1	318.8	278.1	261.2
30°	408.7	360.9	290.7	246.5	228.9
32.5°	389.7	336.3	262.6	213.5	195.9
35°	370.0	311.1	234.5	181.2	162.2
37.5°	349.0	285.8	204.3	150.3	130.6
40°	327.2	261.2	176.9	120.1	98.3
42.5°	306.1	236.6	149.6	90.6	66.7
45°	283.0	212.1	123.6	59.7	39.3
47.5°	261.2	188.2	96.9	34.4	20.4
50°	236.6	163.6	71.6	18.3	13.3
52.5°	213.5	139.7	47.7	11.9	10.5
55°	190.3	116.6	28.1	9.8	8.4
57.5°	163.6	94.1	15.4	7.7	6.3
60°	140.4	73.7	10.5	5.6	4.9
62.5°	113.8	54.1	7.7	4.2	3.5
65°	89.9	35.8	5.6	2.8	2.1
67.5°	66.7	21.1	3.5	1.4	1.4
70°	44.2	11.2	2.1	0.7	0.7
72.5°	23.2	4.9	1.4	0.7	0.7
75°	7.0	2.1	0.7	0.7	0.7
77.5°	0.0	0.7	0.0	0.0	0.7
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)